GA-073 Hand-tool dry-brushing station

Secure a replaceable commercial brush over a catch tray while loose soil is removed from a disconnected hand trowel or hoe head.

Controlling dimensions: US inches and feet. Metric equivalents are references. Original editorial design; no physical build, animal trial or load certification is claimed.

Before marking and cutting

Measure the stated stock sections before cutting. Use the cut-list geometry, not scale measurements from the drawing.

US inch dimensions control; millimeter values are rounded conversions. Ordinary cut target ±1/16 in (1.6 mm); fit commercial accessories before boring attachment holes.

Use limits

Original bounded garden component, not an occupied structure.

No human standing, sitting, climbing, lifting or fall protection use. No stated safe working load.

Geometry and fastener quantities are editorially checked; no prototype build, wind test or crop trial is claimed.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
P01 Base	1	20 × 12 × 3/4 in 508 × 304.8 × 19.05 mm	measured 3/4 in plywood exterior-bond plywood for protected non-food-contact fixtures
P02 Brush support rails	2	11 1/2 × 1 1/2 × 3/4 in 292.1 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage
P03 Rear debris shield	1	20 × 8 × 1/2 in 508 × 203.2 × 12.7 mm	measured 1/2 in plywood exterior-bond plywood for protected non-food-contact fixtures; substitute thickness only by recalculating joints

Hardware and consumables

8 #8 × 1-1/4 in screws for rails, 4 each

4 #6 × 1-1/4 in screws for rear shield

1 commercial soft/stiff nylon bench brush with sound 14 × 3 in reference backing, attachment per product

2 bench clamps; removable catch sheet; no powered wire wheel

Tools

Tape measure and steel rule; Pencil, square and clamps; Saw suited to the stated stock; eye and hearing protection; Drill/driver, countersink and bits matched to fasteners; Sandpaper and edge file; gloves when handling cut mesh

Primary context and design record

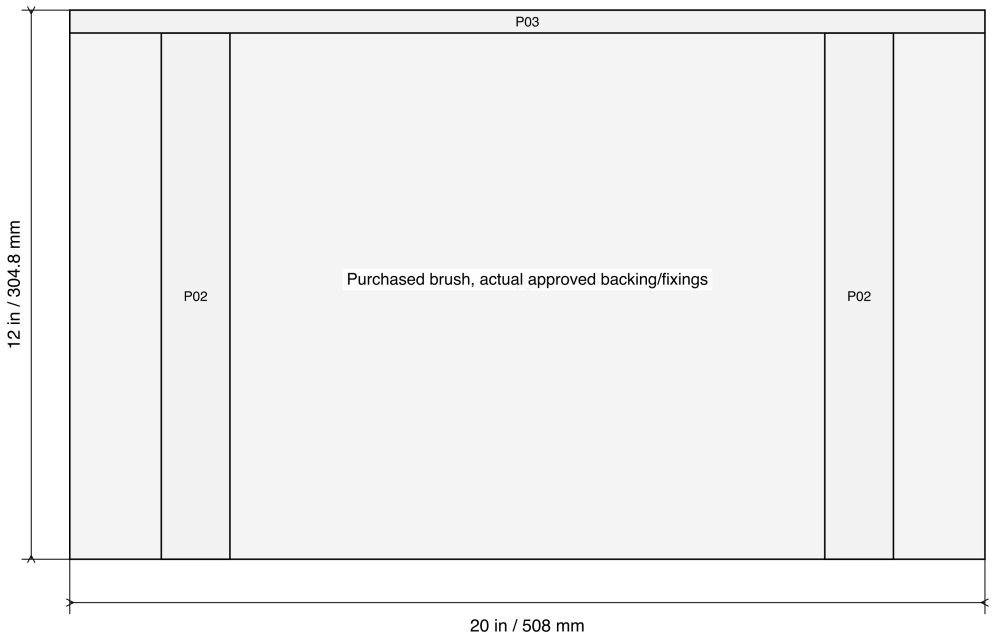
Context references; not design endorsements or certifications.

E13 · Selecting Gardening Equipment · University of New Hampshire Extension · https://extension.unh.edu/sites/default/files/migrated_unmanaged_files/Resource006378_Rep9131.pdf

Assembly and first checks

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PLAN — looking down; rear at top; controlling dimensions in inches



Part IDs refer to the finished cut list. Shapes are not load-rated. Read assembly before cutting.

Notches, holes, fittings and operating angles: see numbered steps and geometric annotations.

Original editorial draft • B/W vector • not physically built or tested • no implied Extension endorsement

01 Plan the hand-tool dry-brushing station for this result: Secure a replaceable commercial brush over a catch tray while loose soil is removed from a disconnected hand trowel or hoe head. Confirm the design reference before cutting: Brush mounting uses actual approved backing and stays firm under light hand work. In the drawings x runs left to right, y runs front to rear and z runs upward.

02 Verify the required stock before laying out these parts: 1 × 2 in board: actual 0.75 × 1.5 in (19.05 × 38.1 mm); measured 1/2 in plywood: measured thickness 0.5 in; measured 3/4 in plywood: measured thickness 0.75 in. Reject split or twisted wood and unknown salvage; thinner stock requires recalculating the joints, not simply using the listed lengths.

03 Cut and label the finished parts: 1 Base 20 × 12 × 0.75 in (508 × 304.8 × 19.05 mm), mark P01; 2 Brush support rails 11.5 × 1.5 × 0.75 in (292.1 × 38.1 × 19.05 mm), mark P02; 1 Rear debris shield 20 × 8 × 0.5 in (508 × 203.2 × 12.7 mm), mark P03. Keep saw kerf outside each finished line. Rip only where the finished width is narrower than the actual stock; use a suitable guide and target ±1/16 in (1.6 mm) for ordinary cuts. Dowel triples mean length × diameter × diameter, not square dowel stock.

04 Place the two support rails flat on the base at x = 2 and 16-1/2 in. Fasten each from below with four 1-1/4 in screws.

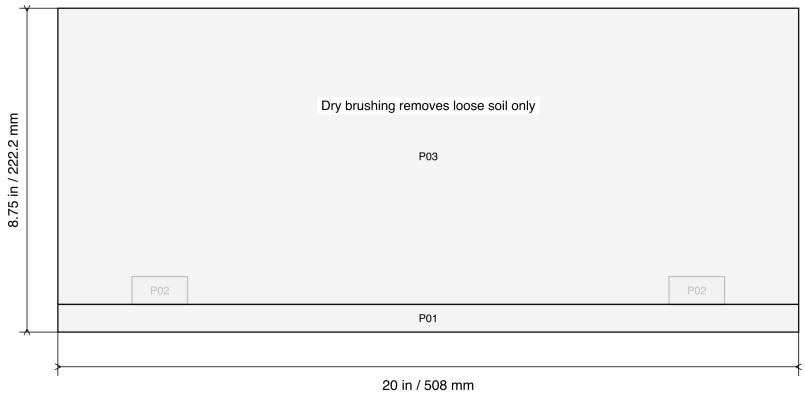
05 Attach the rear shield at the base rear edge with four underside 1-1/4 in screws into its lower edge, carefully predrilled. The 11-1/2 in support rails stop at the shield front face, leaving no volume interference.

06 Select a brush with a manufacturer-permitted mounting backing that spans both rails. Measure its actual hole locations before drilling anything.

Complete the assembly

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FRONT — transparent assembly projection from y = 0; controlling dimensions in inches



Part IDs refer to the finished cut list. Shapes are not load-rated. Read assembly before cutting.
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07 Fit the brush bristles upward with compatible through-fixings/backing washers chosen for that actual brush, not screws driven blindly into a hollow brush body.

08 Place a removable catch sheet below/around the brush and clamp the base to a stable bench. Check that the brush cannot lift during a light trial stroke.

09 Brush a blunt waste tool first, moving away from the holding hand and body. Keep sharp cutting edges sheathed or use their separate cleaning method.

10 Remove loose soil from suitable disconnected hand tools only. Brush slowly to avoid dust; this is not for moldy or pesticide-contaminated debris.

11 Lift the catch sheet for disposal and take the tool to any separate washing, drying, sharpening or disease-control process it needs. Dry brushing alone is not disinfection.

12 Complete the acceptance checks below before putting the assembly into service. Record any changed stock thickness, fastener or equipment fit on the project sheet. The published geometry has not been physically built or load-tested.

Acceptance and intermediate checks

Brush mounting uses actual approved backing and stays firm under light hand work.

Shield/sheet catch debris and all clamps stay out of the brushing path.

Operation

No powered brushing, sharpening, sterilization or claim that dirty tools become pathogen-free.

Cleaning and maintenance

Clean catch sheet and brush, replace worn bristles and dry wood.